

**REMARKS**

***Preliminary Matters:***

Applicants thank the Examiner for acknowledging Applicants' claim to priority and receipt of the priority document. Further, it is noted with appreciation that the Examiner has considered the references cited in the Information Disclosure Statement filed concurrently with the application. Finally, Applicants' thank the Examiner for accepting the drawings.

***Disposition of Claims:***

Claims 1-10 are all the claims in the application. Of these claims, claims 1-4 are rejected and claims 5-10 are objected to.

***Allowable Subject Matter:***

Claims 5-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicant holds in abeyance the rewriting of these claims in independent form.

***Claim Rejections Under 35 U.S.C. § 102:***

Claim 1 is rejected under 35 U.S.C. § 102(e) as being anticipated by Pratt (U.S. Patent No. 6,865,316).

Applicant respectfully traverses the rejection of independent claim 1 at least because Pratt does not disclose all of the claim's recitations. For example, Pratt does not disclose the claimed device in which:

- (1) at least a *first mode converter* is associated with a multimode fibre, the first converter being supplied with signals that are propagated in accordance with a

first guided mode and delivering those signals in the multimode fibre partly in the first guided mode and partly in a second guided mode of a higher order than the first, and

(2) *the multimode fibre comprises at least first passive filtering means* which are arranged to convert the first guided mode into at least one dissipative cladding mode in order to prevent or limit the propagation of the signals in this first guided mode while at the same time authorising the propagation of the signals in the second guided mode in the multimode fibre.

By the device of claim 1, a passive filter means is applied after a converter having the task of converting the first guided mode into at least one dissipative cladding mode. The Ipo1 mode is converted into Ipo2 with a small part of Ipo1 remaining, which is filtered out. The Ipo2 which is effectively cleaned up is then reconverted into Ipo1. This configuration reduces the ratio between the energies of the lower order mode and the higher order mode.

The Examiner is of the opinion that an optical device according to claim 1 is anticipated by Pratt. Applicant respectfully disagrees.

Pratt discloses a system for dissipating cladding modes of an optical fiber. This is brought about by the multiple reflections of this cladding mode into a “box” with either an absorbing filler (34 in FIG. 3 of Pratt) or absorbing walls (36 in FIG. 3 of Pratt). The remaining mode is the single mode.

In contrast, to the claimed device, however, Pratt does not contain a converter able to convert a first guided mode into a second guided mode.

Moreover, the device of claim 1 includes a multimode fiber with a first passive filter means. The Examiner asserts that Pratt’s grating 16 corresponds with the recited passive filter

means. However, the Examiner is misapprehending Pratt, which in no way mentions that this grating can be used as a filter means or that this grating *can be implemented in the fiber*. Instead, Pratt's grating 16 is merely positioned in the IBC laser.

Thus, for the reasons discussed above, Applicant respectfully requests the Examiner to withdraw the rejection of independent claim 1.

***Claim Rejections Under 35 U.S.C. § 103:***

Claim 3 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Pratt. Further, claims 2 and 4 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Pratt in view of Amundson, et al. (U.S. Patent No. 6,385,368).

Applicant respectfully submits that dependent claims 2-4 are patentable at least because of their dependency from claim 1.

***Conclusion***

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

/John M. Bird/

John M. Bird  
# 46,027

SUGHRUE MION, PLLC  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

for Brian W. Hannon  
Registration No. 32,778

WASHINGTON OFFICE

**23373**

CUSTOMER NUMBER

Date: August 7, 2009